IN THE CLAIMS

1. (Canceled)

2-9. (Canceled)

10. (Previously presented) A method for the detection of the presence or absence of a single stranded or double stranded first nucleic acid in a sample, by automated isothermal amplification of said first nucleic acid, said method performed in at least two reaction vessels which can be placed in fluid communication with each other, said method comprising:

a) combining in a first reaction vessel; a test sample and reagents suitable for carrying out a nucleic acid amplification reaction such that a reaction mixture can form and placing said reaction vessel in an automated apparatus such that:

b) the automated apparatus heats said first reaction vessel to a sufficient temperature, and for a sufficient time to render any double stranded first nucleic acid in the sample to be tested into sufficient single stranded nucleic acid available for hybridization, and

c) the automated apparatus cools said first reaction vessel to a sufficient temperature to form a hybridization product, said hybridization product comprising at least one oligonucleotide primer and a first nucleic acid if said first nucleic acid is present in said test sample,

d) contacting said product from said first reaction vessel with a nucleic acid amplification enzyme to provide a nucleic acid amplification mixture and transferring said amplification mixture to a second reaction vessel,

e) amplifying said first nucleic acid wherein the automated apparatus maintains the temperature of said second reaction vessel at a sufficient temperature which allows for a specific oligonucleotide primer mediated amplification of said first nucleic acid to produce amplicons, and

f) detecting the presence of amplicons.

11. (Previously Presented) The method according to claim 10 further comprising capturing said amplicons with a nucleic acid capture probe bound on a solid support such that a capture probe hybridization complex is formed.

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12. (Previously Presented) The method according to claim 11 further comprising contacting said capture probe hybridization complex with a labeled nucleic acid probe specific for said amplicons such that a labeled probe complex is formed.

13. (Previously Presented) The method according to claim 12 further comprising contacting said labeled probe complex with a substrate to generate a detectable signal whereby said signal is proportional to the amount of said first nucleic acid in said test sample.

14. (Previously presented) The method according to claim 10 wherein said reagents comprise a reaction buffer, a mixture of free nucleotides, or at least one oligonucleotide primer.

15. (Previously presented) The method according to claim 10 wherein said apparatus transfers said reaction mixture from said first reaction vessel to a second reaction vessel containing said nucleic acid polymerization enzyme, such that said reaction mixture is brought into contact with said nucleic acid amplification enzyme in said second reaction vessel.

16. (Previously presented) The method according to claim 10 wherein said apparatus transfers said nucleic acid amplification enzyme contained in said second reaction vessel to said first reaction vessel, such that said nucleic acid polymerization enzyme is brought into contact with said reaction mixture.

17. (Previously presented) The method according to claim 11 wherein said solid support is a pipette-like device.

18. (Previously presented) The method according to claim 11 wherein said solid support is controlled by an automated apparatus.

19. (Previously presented) The method according to claim 11 further comprising washing said capture probe hybridization complex bound on said solid support such that non-specifically bound amplicons and nucleic acids are washed away from said solid support.

20. (Previously presented) The method according to claim 12 further comprising washing said labeled probe complex such that non-specifically bound amplicons and labeled nucleic acid probes are washed away from said solid support.

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21. (Currently Amended) The method according to claim [[10]] 13 wherein said automated apparatus displays a value for said signal and optionally records a value for said signal.

22. (Previously presented) The method according to claim 10 wherein said nucleic acid amplification enzyme is loaded in said second reaction vessel as a lyophilized pellet in single assay or unit dose amount.

23. (Previously presented) The method according to claim 22 wherein said second reaction vessel is sealed prior to use.

24. (Previously presented) The method according to claim 16 wherein said enzyme is brought into contact with said reaction mixture during the transfer process.

25. (Previously presented) The method according to claim 10 wherein said amplification mixture is transferred to said second reaction vessel through a fluid channel, said fluid channel comprising a valve which operates to flow between said vessels.

26. (Previously presented) The method according to claim 25, wherein said valve is a thimble valve.

27. (New) A method for the detection of the presence or absence of a single stranded or double stranded first nucleic acid in a sample, by automated isothermal amplification of said first nucleic acid, said method performed in a reaction vessel comprising at least two reaction chambers which can be placed in fluid communication with each other, said method comprising:

a) combining in a first reaction chamber: a test sample and reagents suitable for carrying out a nucleic acid amplification reaction such that a reaction mixture can form and placing said reaction vessel in an automated apparatus such that:

(i) the automated apparatus heats said first reaction chamber to a sufficient temperature, and for a sufficient time to render any double stranded first nucleic acid in the sample to be tested into sufficient single stranded nucleic acid available for hybridization, and

(ii) the automated apparatus cools said first reaction chamber to a sufficient temperature to form a hybridization product, said hybridization product comprising at least one oligonucleotide primer and a first nucleic acid if said first nucleic acid is present in said test sample,

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b) contacting said product from said first reaction chamber with a nucleic acid amplification enzyme to provide a nucleic acid amplification mixture and transferring said amplification mixture to a second reaction chamber,

c) amplifying said first nucleic acid wherein the automated apparatus maintains the temperature of said second reaction chamber at a sufficient temperature which allows for a specific oligonucleotide primer mediated amplification of said first nucleic acid to produce amplicons, and

d) detecting the presence of amplicons.

28. (New) The method according to claim 27 which further incorporates internal control molecules.

29. (New) The method according to claim 27 further comprising detecting the presence of amplicons with a labeled nucleic acid probe.

30. (New) The method according to claim 27 wherein said reagents comprise a reaction buffer, a mixture of free nucleotides, and at least one oligonucleotide primer.

31. (New) The method according to claim 27 wherein said automated apparatus transfers said reaction mixture to said second reaction chamber.

32. (New) The method according to claim 29 wherein said automated apparatus displays a value for detected labeled probe and optionally records said value.

33. (New) The method according to claim 27 wherein said nucleic acid amplification enzyme is loaded in said reaction vessel as a lyophilized pellet in single assay or unit dose amount.

34. (New) The method according to claim 31 wherein said enzyme is brought into contact with said reaction mixture during the transfer process.

35. (New) The method according to claim 27 wherein said amplification mixture is transferred to said second reaction chamber through a fluid channel, said fluid channel comprising a valve which operates to flow between said chambers.

36. (New) The method according to claim 35, wherein said valve is a thimble valve.

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